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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/088,330

12/30/2003

Thomas J. Good

10455-1US

4637

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12/18/2006

EXAMINER

KIM, SUN U

ART UNIT

PAPER NUMBER

1723

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/18/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/088,330		GOOD ET AL.	
	Examiner		Art Unit	
	John Kim		1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-17, 19, 21-25 and 27-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-17 and 22-24 is/are allowed.
- 6) ☒ Claim(s) 1-5, 11, 21, 25, 27, 29-34 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 6-8, 19, 28, 35-38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The request to correct the inventorship of this nonprovisional application under 37 CFR

1.48(a) is deficient because:

An oath or declaration by each actual inventor or inventors listing the entire inventive entity has not been submitted.

Oath filed 10/29/06 does not list the entire inventive entity including Bruce W. Redmond.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 depends on a canceled claim 18. For examination purpose, claim 19 depends on claim 17.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 27, 29-33 and 39-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Pieper et al (US Pat. No. 5,391,298). Pieper et al teach an apparatus for extracting a substance from a liquid sample comprising a container having a top (20) with an inlet (28) and a bottom (22) having a centrally located outlet (36) and a substantially flat inner wall and the container (20, 22) having a thin layer of microparticulate extraction media disk (40) having a diameter of 47 mm and a thickness of 0.5 mm which meets the claimed ratio of the diameter of the extraction

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media layer to the thickness of the extraction media layer being at least 10 and the extraction media disk (40) being sandwiched between two cylindrical porous sheets (42, 44) i.e. compression layers and a lower mesh flow distributor (38) below the lower porous sheet (44) wherein a liquid sample is passed through the container to extract analyte from the liquid sample by the extraction media (see figures (see figures 2-3; col. 4, line 7 – col. 6, line 27; col. 7, line 51 – col. 8, line 24; col. 1, lines 10-28).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5, 11, 21, 25 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mehl (US Pat. No. 4,774,058) in view of Markell et al (US Pat. No. 5,279,742). Mehl teaches method of using a filter for separating fluid samples comprising a container (12), a thin extraction media of particles (42) made of silica which are retained by upper and lower compression layers (36, 38, or 44) made of glass fibers which inherently have a pore size less than the particle of the extraction media to retain particles wherein the container (12) having an entrance, an exit and a passage comprising a sidewall and a substantially centrally located exit in a substantially flat bottom wall of the container and the sidewall is in contact with the peripheral edge of the media layer containing particles (42) and the bottom wall is substantially perpendicular to a flow path between the entrance and the exit (see figures 1-7; col. 2, lines 9-16; col. 3, lines 37-47; col. 4, line 61 – col. 5, line 55). Mehl also teaches that thickness of disc is 0.4 mm and the diameter of disc is 4 mm and such specification of disc meets the claimed ratio of

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the effective diameter of the extraction media layer to the thickness of the layer of at least 10 (see col. 3, lines 37-47; col. 4, lines 61-64). Claims 1-5, 11, 21, 25 and 41 essentially differ from the method and apparatus of Mehl in reciting that the extraction media has a particle size of less than 20 microns. Markell et al teach an extraction media disk comprising particles having a size less than 20 microns (see col. 8, line 27 – col. 10, line 11). Incorporating particles having a size less than 20 microns in the extraction media of Mehl would have been obvious at the time the invention was made since such particles are known to be used for extraction process as taught in Markell et al.

8. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pieper et al.

Pieper et al teach an apparatus for extracting a substance from a liquid sample as described in above paragraph 5. Pieper et al teach a particulate material having a size in the range of 0.1 to about 600 micrometers, preferably in the range of 1 to 100 micrometers (see col. 4, lines 55-60). Pieper et al disclose the claimed invention except for a extraction media having a particle size of less than 20 microns. It would have been obvious to one having ordinary skill in the art at the time the invention was made to discover optimal particle size of less than 20 microns since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

9. Claims 12-17 and 22-24 are allowed.

10. Claims 6-8, 28 and 35-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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11. Claim 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

12. The terminal disclaimer filed on 10/19/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 5,595,653 has been reviewed and is accepted. The terminal disclaimer has been recorded.

13. Applicant's arguments with respect to claims 1-8, 11-17, 19, 21-25 and 27-41 have been considered but are moot in view of the new ground(s) of rejection. Applicants argue that the housing (18) of Pieper et al comprises a conical bottom. However, Fig. 3 of Pieper et al shows a slightly sloped bottom wall of the housing and such wall meets the claimed limitation of "the bottom having an inner wall which is substantially flat with the exit". Applicants argue that Mehl does not include a substantially flat bottom wall having a substantially centrally located exit and that the filter of Mehl comprises a sidewall (i.e. support member 12) which ends at a lower opening (16) in Figures 2 and 9. However, the bottom surface of the side wall (12) is considered a flat bottom wall and a lower opening (16) is centrally located exit in the bottom wall.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John Kim
Primary Examiner
Art Unit 1723

JK
December 13, 2006